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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 021204

Application Number: 09/455,664

Filing Date: December 07, 1999

Appellant(s): MELGAARD ET AL.

Norman N. Spain  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 12-12-03.

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**(2) *Related Appeals and Interferences***

A statement identifying the real party in interest is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

No amendment after final has been filed.

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows:

**Claims 2 – 4, 6, 9 – 11 and 15** are rejected under 35 U.S.C. 102 (e) as being anticipated by O'Flynn et al., and not claims *2 – 4, 6 – 9, 11 and 15* as mentioned in the appeal brief.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 2 – 6, 9 - 11 and 15 do not stand or fall together, however the brief failed to provide reasons as why these abovementioned claims do not stand or fall together, as set forth in 37 CFR 1.192(c)(7) and (c)(8).

The rejection of claims 15, 2 – 6 and 9 - 11 stand or fall together because appellant's brief does not include a statement providing reasons to support that this grouping of claims does not stand or fall together. See 37 CFR 1.192(c)(7).

**(8) *ClaimsAppealed***

Claims 3 – 5 and 11 contain substantial errors as presented in the Appendix to the brief. Accordingly, claims 3 – 5 and 11 have been correctly written in the Appendix to the Examiner's Answer.

**(9) *Prior Art of Record***

The following are the U.S. Patents which have been made prior art of record:

6,383,381 B1	O'Flynn et al.	5-2002
866,796	Martindale	9-1907

**(10) *Grounds of Rejection***

The following grounds of rejection are applicable to the appealed claims:

Claims 15, 2 – 4, 6 and 9 – 11 have been rejected under 35 U.S.C. 102 (e) as being anticipated by O'Flynn et al. (381). This rejection is set forth in prior Office Action, Paper No. 26/Mail date of 3/31/03, paragraphs 2 – 10, pages 2 - 4.

Claim 5 has been rejected under 35 U.S.C. 103 (a) as being unpatentable over O'Flynn et al. (381) in view of Martindale (796). This rejection is set forth in prior Office Action, Paper No. 26/Mail date of 3/31/03, paragraphs 12 – 13, page 5.

**(11) *Response to Arguments***

*The following summarizes examiner's response to the arguments made by the applicants according to the issues enumerated by the applicants.*

**I. Response to Arguments with respect to claims 15, 2 – 4, 6 and 9 – 11 being rejected under 35 U.S.C. 102 (e) as being anticipated by O'Flynn et al. (381).**

A. Regarding claim 15, which is the independent claim, O'Flynn et al. (primary reference) in fact, disclose a filter (12) for use in a water heating vessel for removing sedimentary material including scale from water (note that sedimentary material such as scale have been considered by the examiner to be equivalent to *particulate matter and scum* which is

being filtered from water by the prior art device of O'Flynn et al), the filter (12) comprising a first mesh material (indicated as 34 in figs. 1, 3 – 5 & 7 - 8) provided with a frame (26, 32) and a scale collector (38, 49), separate(i.e. a distinct and removable element) from the first mesh material (34) and coupled to the frame (26, 32), the scale collector (38, 49) comprising a block (i.e. shaped like a block) of compressed (the term is not found in the original specification and has been considered to mean "configured or shaped") mesh material (49) different from the first mesh material (34) and having a surface to which scale is *attracted* (i.e. trapped) [see cols. 1 – 4 of O'Flynn et al. for details]. In this rejection, the examiner has considered the 3 dimensional/shaped outer surface of the cartridge (38) having the mesh-covered apertures (49) to be the scale collector, in that those mesh-covered apertures are actually the one that trap/attract the scale/particulate matter and scum in the water prior to being treated by the water treatment media within the cartridge (38). Therefore, the removable cartridge (38) serves not only to remove bad odor, tastes and color of the water passing therethrough, but the outer surface with the mesh-covered apertures (49) which would have very small openings to not only hold the water treatment media (such as activated carbon or an ion exchange media) within but capable of trapping particulate matter such as scum/scale, etc. from getting within the cartridge. Furthermore, the shape or form (which is a block) being argued by the applicants of the (second) mesh material of the scale collector could be spherical or cube-shaped and carried in a cage like structure (see specification page 6, lines 9 – 13), and in this instance, O'Flynn et al. have shown a mesh material (in apertures 49) which are spherical in shape (see figures 7 – 8, 10 – 16 and 17 - 19 of O'Flynn et al.).

**B.** With regards to claim 2, O'Flynn et al. also disclose the scale collector being supported by a carrier member (in the form of a frame 38, 44, 41 or 43 surrounding the mesh-covered apertures 49 and shoulders 36) on the frame (26) of the filter (12), as in figs. 10 – 19.

**C.** Concerning claim 3, O'Flynn et al. further disclose the carrier member (defined by the frame 38 or 41 which carries or holds the mesh material covering the apertures 49) being detachably mounted (i.e. removable) on the frame (26, 32), particularly in cols. 4 - 5.

**D.** With respect to claim 4, O'Flynn et al. also disclose the carrier member (defined by the frame member 38), with the mesh material covering apertures 49 with the treatment media contained therein, could be permanently mounted on the frame (26), as in col. 4, lines 17 – 21.

**E.** Regarding claim 6, O'Flynn et al. further disclose the carrier member (frame 38 or 44) being situated on a part (i.e. lower end of the frame 38 and attached to a member 36 or 54) of the frame (26) away from the first mesh material (34), as in figs. 7 – 8 & 18 - 19.

**F.** With respect to claim 9, O'Flynn et al. also disclose the scale collector (defined by the cartridge 38, particularly by the mesh material covering apertures 49) being carried on the frame (26, 32) towards an end (i.e. its lower end) thereof which in use in a water heating vessel (10, 14) is closest to the bottom of the vessel (10, 14), as in figs. 1, 7 - 8 and 18 - 19.

**G.** Concerning claim 10, O'Flynn et al. further disclose a water heating vessel (10, 14) including the filter according to claim 15 (see paragraph A above) removably mounted within the vessel (10, 14) and extending over a water outlet of the vessel (10, 14), as in fig. 1 and cols. 2 – 5.

**H.** With regards to claim 11, O'Flynn et al. disclose the water heating vessel comprising a kettle (electric water kettle, 10), as in cols. 1 – 5 and fig. 1.

**II. Response to Arguments with respect to claim 5 being rejected under 35 U.S.C. 103 (a) as being unpatentable over O'Flynn et al. (381) in view of Martindale (796).**

**A.** Applicants' arguments with respect to claim 5 rely on the assertion that the rejection under 102(e) using the primary reference, O'Flynn et al. do not hold, or that the primary reference fails to meet the limitations/features being recited in the base/independent claim 15. This is simply unjustified and incorrect. It is clearly pointed out in section I, paragraph A above, how the primary reference, O'Flynn et al. disclose all the recited features/limitations of the independent claim 15. The only missing element that is recited and added by claim 5, not disclosed by O'Flynn et al., is the scale collector (which has been designated to be the mesh material (actual element which can trap or remove particulate matter such as scale) covering apertures 49 of frame/carrier element 38) being removably mounted on the carrier (38). In other words, O'Flynn et al. fail to disclose the scale collector (which is considered to be or in the form

of mesh material covering apertures 49) being removably mounted on the carrier member (i.e. frame 38).

Martindale (796) teaches a removable strainer [10 which is formed of single piece of wire fabric ("mesh")] capable of use as a scale collector, the strainer comprising a block (here, "a block" means a square configuration or a rectangular piece) of compressed (configured or shaped) mesh (wire fabric, 10) material capable of removing scale (particulate matter/debris floating in the water) from water in which the mesh material (10) is removably mounted on a carrier member (frame 8, 9), as in figs. 1 – 4 and page 1.

It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the arrangement/design of the scale collector (which is the mesh material covering the apertures of the frame/cartridge 38) of O'Flynn et al. which is permanently attached on the carrier member (38), by adding the embodiment taught by Martindale, such that the scale collector/mesh material would be removably mounted on the carrier member (38), in order to provide an improved filter which has a scale collector/mesh element which can be cheaply and easily replaced upon its damage or clogging, without having to throw away or replacing the entire scale collector assembly (mesh material plus its carrier member (i.e. entire cartridge)) in order to save costs of replacing/in the manufacture of the entire scale collector/strainer assembly (see page 1 of Martindale's specification).

**B.** It is noted that in the above rejections, particular that of claim 5, the applicants argue that the prior art device of O'Flynn et al. (alone) and as modified by Martindale, do not have scale collecting function (see page 9 of the Appeal Brief in paragraph 2 of section II). The

examiner disagrees with the applicants in this assertion. In particular, the mesh material (which covers the apertures of the frame/cartridge 38) of O'Flynn et al. can easily trap particulate matter which would include scale and scum in water, which is considered to be a "scale collecting function" that the filter of O'Flynn et al. and as modified by Martindale, is capable of.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

*Marianne Ocampo*  
Marianne Ocampo, examiner

*Wanda Walker*  
Wanda Walker, Primary examiner/SPE

M.S.O.  
February 12, 2004

Conferees :

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APPENDIX

The claims on appeal are:

2. A filter for use in a water heating vessel according to Claim 15, wherein the scale collector is supported on the frame of the filter.
3. A filter for use in a water heating vessel according to Claim 2, wherein the carrier member is detachably mounted on the frame.
4. A filter for use in a water heating vessel according to Claim 2, wherein the carrier member is permanently mounted on the frame.
5. A filter for use in a water heating vessel according to Claim 2, wherein the scale collector is removably mounted on the carrier member.
6. A filter for use in a water heating vessel according to Claim 3, wherein the carrier member is situated on a part of the frame away from said first mesh material.
9. A filter for use in a water heating vessel according to Claim 15, wherein the scale collector is carried on the frame towards an end thereof which in use in a water heating vessel is closest to the bottom of the vessel.

10. A water heating vessel including a filter according to Claim 15 removably mounted within the vessel and extending over a water outlet of the vessel.
11. A water heating vessel according to Claim 10, wherein the water heating vessel comprises a kettle.
15. A filter for use in a water heating vessel for removing sedimentary material, including scale, from the water, wherein the filter comprises a first mesh material provided with a frame and a scale collector, separate from said first mesh material and coupled to the frame, said scale collector comprising a block of compressed mesh material different from said first mesh material and having a surface to which scale is attracted.